SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name:	411	Examiner # :	Date:
Art Unit: Mail Box and Bldg/Roon	Phone Number 30 1 Location:	Examiner # : Serial Number: Results Format Preferred (circ	cle): PAPER DISK E-MAIL
If more than one searcl ************************************	n is submitted, please (********* ment of the search topic, and structures, keywords, synony te any terms that may have a	prioritize searches in order of ***********************************	need. ********* subject matter to be searched. and combine with the concept or
Title of Invention:			
Inventors (please provide fi	ull names):		
Earliest Priority Filing D *For Sequence Searches Only appropriate serial number.	Date:	formation (parent, child, divisional, or iss	sued patent numbers) along with the

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
	NA Sequence (#)	STN
Searcher:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#)	Questel:Orbi:
Date Searcher Picked Lin'	Bibliographic	Dr.Link
Date Completed/	Litigation	Lexis/Nexis
Searcher Prep & Review Time	Fulitext	Sequence Systems
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Online Time.	Other	Other (specify)

PTO-1590 (1-2000)

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Scoring table:
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Perfect score:
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   of hits satisfying chosen parameters:
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1: /cgn2_6/ptodata/2,
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US-08-691-794-4
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US-08-915-795-9
Query Match
Best Local Similarity
Matches 36; Conserv
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Result

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ALIGNMENTS

MOLECULE TYPE: p. ORIGINAL SOURCE: TISSUE TYPE: MC-08-915-795-9 TELEFAX: (204) ... TELEX: N/A TELEX: N/A INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS: 'FNGTH: 321 amino acids Sequence 9, Application US/08915795 Patent No. 6235713 GENERAL INFORMATION: ATTORNEY/AGENT INFORMATION: NAME: EVANS, JOSEPh D. REGISTRATION NUMBER: 26,269 REFERENCE/DOCKET NUMBER: 1064 TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 628-8800 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: LIGHT COMPACTION OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: CORRESPONDENCE ADDRESS: ADDRESSEE: Evenson, McKeown, Edwards & Lenahan P.L.L.C. STREET: 1200 G Street, NW, Suite 700 NUMBER OF SEQUENCES: 11 APPLICANT: MARC G. ACHEN APPLICANT: Andrew F. WILKS APPLICANT: Steven A. STACKER APPLICANT: KARI ALITALO COUNTRY: STREET: 1200 G SI CITY: Washington STATE: DC TOPOLOGY: 1in FILING DATE: CLASSIFICATION: 536 APPLICATION NUMBER: 20005 SS: single linear United States of America protein Mouse Lung US/08/915,795 9: 064/42983

Conservative

15;

Score 119.5; DB of Pred. No. 1.4e-05; Mismatches 4:

DB 4; 42;

Length 321; Indels

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INFORMATION FOR SEQ ID NO: 8
SEQUENCE CHARACTERISTICS:
LENGTH: 358 amin - Type
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MOLECULE TYPE: p
ORIGINAL SOURCE:
TISSUE TYPE: M
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APPLICANT: Andrew F
APPLICANT: Steven A
APPLICANT: Kari ALI
TITLE OF INVENTION:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 628-8800
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TITLE OF INVENTION: GROWTH FACTOR
NUMBER OF SEQUENCES: 11
                                                                              159
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Application US/08915795
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Steven A. STACKER
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US-08-915-795-5; Sequence 5, A
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Matches
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TELEX: N/A
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 325 amino acid
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APPLICANT: Kari ALITALO
TITLE OF INVENTION: GROUNUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                      APPLICANT:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915,795
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TISSUE TYPE:
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NAME: EVANS, JOSEPH D.
REGISTRATION NUMBER: 26,
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                                            CORRESPONDENCE ADDRESS:
                                                           TITLE OF INVENTION: GROWTH FACTOR NUMBER OF SEQUENCES: 11
                                                                                       APPLICANT: Steven A. STA
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HYPOTHETICAL:
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        ADDRESSEE: Evenson, McKeown, Luwalus STREET: 1200 G Street, NW, Suite 700
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34; Conservative
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1200 G Street, NW, Suite
                                                                                                       Marc G. ACHEN
Andrew F. WILKS
Steven A. STACKER
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(202) 628-8844
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Steven A. STACKER
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NO
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                                                                                                                                                                                                                                                                                                                                                                                                          18.6%;
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                                                                                                                                                                                    US/08915795
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                                                                                                                                                                                                                                                                                                                                                                                          Score 115.5; |
Pred. No. 3.8e
14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              064/42983
                             Edwards & Lenahan P.L.L.C
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uite 700
                                                                                                                                                                                                                                                                                                                                                                                                          3.8e-05;
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US-08-094-079-2
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                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:

NAME: EVANS, JOSEPH D.

REGISTRATION NUMBER: 26,269

REFERENCE/DOCKET NUMBER: 1064

TELECOMMUNICATION INFORMATION:

TELEPHONE: (202) 628-8800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HYPOTHETICAL: NO ORIGINAL SOURCE: TISSUE TYPE: 1
                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                             STREET: LUCITY: Chicago
CITY: Illinois
TISA
                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Allegrett
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                             SOFTWARE: PatentIn Release #1 0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                 APPLICANT: COOK, Anne L
APPLICANT: CRAIG, Stewart
APPLICANT: CLEMENTS, John M
APPLICANT: EDWARDS, Richard M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                      TITLE OF
                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         156 TSTSYISKOLFEISV---PLTSV----PELVPVKVANHTGCKCL 192
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 CVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVALEHHEECDCV 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99 LKVIDEEWQRTQCSPRETCVEVASELGKSTNTFFKPPCVNVFRCGG---CCNEESLICMN 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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FILING DATE:
               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0,
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                                                                                                                                   60606
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                                                                                                                                                                                              10 S. Wacker Dr.
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                                                                                                                                                                                                                                                                                    BROWN, David
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                                                                                                                                                                                                                    Allegretti & Witcoff, Ltd.
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24-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
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              US/08/094,079
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; Pred. No. 4.2e-05;
14; Mismatches 44
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                                               Version #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 4;
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; LOCATION: 1..109
; OTHER INFORMATION:
US-08-094-079-2
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                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                             APPLICANT: BROWN, David
TITLE OF INVENTION: PDGF-B ANALOGUES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER: GB 9:
FILING DATE: 24-JAN-1991
ATTORNEY/AGENT INFORMATION:
APPLICATION NUMBER: WO POFILING DATE: 24-JAN-1992 PRIOR APPLICATION DATA:
                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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LENGTH: 109 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 312-715-1000
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: COOK, Anne L
APPLICANT: CRAIG, Stewart
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                                                                                         APPLICATION NUMBER: US/0
FILING DATE: 24-JAN-1992
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STRANDEDNESS: sir
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                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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                                                                                                                                                                                                                                               60606
                                                                                                                                                                                                                                                                                Illinois
                                                                                                                                                                                                                                                                                                                   E: Allegretti & Witcoff, Ltd
10 S. Wacker Dr.
                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                            CLEMENTS, John M
EDWARDS, Richard M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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33.3%;
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                                      WO PCT/GB92/00141
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                                                                                                             US/08/094,079
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FR: 93
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APPLICATION NUMBER:

GB 9101645.1

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            STATE: New York
COUNTRY: U.S.A.
ZIP: 10017-4059
ZIP: 10017-4059
COMPUTER READABLE FORM:
MEDIUM TYPE: 3-1/2" DISKETTE
COMPUTER: IBM-XT COMPATIBLE
OPERATING SYSTEM: DOS 3.3:
SOFTWARE: WORDPERFECT 5.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/804,953
FILING DATE: 24-FEB-1997
CLASSIFICATION 257
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/720,771
FILING DATE: 08/07/91
FILING DATE: 08/07/91
APPLICATION NUMBER: PCT/EP90/00063
FILING DATE: 01/11/90
FILING DATE: 01/11/90
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Best Local Similarity
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APPLICANT: Hoppe, Jurgen
APPLICANT: Weich, Herbert
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
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ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Joseph T. Eisele
ADDRESSEE: Kane, Dalsimer, Sullivan, Kurucz,
ADDRESSEE: Levy, Eisele and Richard
STREET: 711 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                   CITY: New York
STATE: New Yor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 RPTQV-----QLRPVQVRKIEIVRKKPIFKKAT-VTLEDHLACKC 99
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TOPOLOGY: lin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PHARMACEUTICALS CONTAINING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Truncated PDGF-B with ARG
28 > SER (PDGF-B5)"
                                    PCT/EP90/00063
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 105; DB 1; Lengun Luce, Pred. No. 0.00015; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-691-794-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 33.39
                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4,
                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                              APPLICANT: Cunningham, Brian C.
APPLICANT: Wells, James A.
APPLICANT: Li, Bing
TITLE OF INVENTION: Variants of Vascular Endothelial Cell
TITLE OF INVENTION: Growth Factor, Their Uses, and Process
TITLE OF INVENTION: Production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELLEPHONE: (212) 687-6000
TELLEPHONE: (212) 682-3485
TELLEPHONE: (212) 682-3485
                                                                                                                                                                                CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANELLE:
IMMEDIATE SOURCE:
CLONE: PDGF-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                           APPLICANT:
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                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: N/A
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CELL TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN: E. COli
INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE:
                                                                                            COUNTRY:
                                                                                                                          CITY: San Francisco
                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 RPTQV-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HAPLOTYPE:
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                                                                                                                                                               ADDRESSEE:
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                                                                          PRY: United States 94111-4187
                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08691794 6057428
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                                                                                                           California
                                                                                                                                               E: Flehr, Hohbach, Test, Albritton & Herbert Four Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109 residues
                                                                                                                                                                                                                                                                                                       Nguyen, Francis H. Ferrara, Napoleone Cunningham, Brian C.
                                                                                                                                                                                                                                                                                                                                                               Keyt, Bruce A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18, Application PC/TUS9102766
GENERAL INFORMATION:
APPLICANT: NASCIMENTO, CARLOS G.
APPLICANT: CALDERON-CACIA, MARIA D.
TITLE OF INVENTION: GLYCOSYLATED PDGF
NUMBER OF SEQUENCES: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 16.9
Best Local Similarity 33.3
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 26-APR-1990
ATTORNEY/AGENT INFORMATION:
NAME: ROBINS, ROBERTA L.
REGISTRATION NUMBER: 33,20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/567,200
FILING DATE: 05-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Dreger, Walter H.
REGIZION NUMBER: 24,190
REFERENCE/DOCKET NUMBER: A-63758/WHD
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
                                                                                                                                                                               CURRENT APPLICATION DATA: APPLICATION NUMBER: PC
                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Irell & Manella
STREET: 545 Middlefield Road, Suite 200
CITY: Menlo Park
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 05-DEC-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 60/002,827
FILING DATE: 25-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                       CLASSIFICATION:
                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
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REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                                                                          94025
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PatentIn Release #1.0, Version #1.30
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    INFUNIT.

ROBERTA L.

33,208
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02-AUG-1996
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                                                                                                 US 07/515,474
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2300-0105.40
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SEQUENCE CHARACTERISTICS:

LENGTH: 109 amino acids

TYPE: AMINO ACID

TOPOLOGY: linear

MOLECULE TYPE: protein

PCT-US91-02766-18
; MOLECULE TYPE: peptide PCT-US93-02612-1
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GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                             INFORMATION FOR SEQ ID NO:
                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acid
TYPE: AMINO ACID
                                                                                                                                                              REFERENCE/DOCKET NUMBER: JE TELECOMMUNICATION INFORMATION: TELEPHONE: 201-822-7255
                                                                                                                                                                                                                                                                                                                                             COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 6.0
SOFTWARE: Microsoft Word 4.00B
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Hesson, Thomas
APPLICANT: Mannarino, Anthony
TITLE OF INVENTION: Monomeric Platelet-Derived Growth Factor and Prevention
NUMBER OF SEQUENCES: 8
                                                                                                                                                                                                                                      PRIOR APPLICATION DATA: None ATTORNEY/AGENT INFORMATION: NAME: Lunn, Paul, G.
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 327-7250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Schering-Plough Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: C...
CTTY: Madison
TTY: Madison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                             TELEFAX: 202
TELEFAX: 219165
                                                                                                                              TELEPHONE: 201-822-7039
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ZIP: 07940
                                     TOPOLOGY:
                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 19930
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                                                    : 109 amino acids
AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
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Query Match Best Local Similarity

Conservative

12;

Mismatches

16.9%; Score 105; DB 5; 33.3%; Pred. No. 0.00015;

Length 109;

Indels

26;

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RESULT 13
5498600-3
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                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/08257494D Patent No. 5863892
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                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                             APPLICANT: Allergan, Inc
TITLE OF INVENTION: USE:
TITLE OF INVENTION: DERI
TITLE OF INVENTION: WOUN
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Allergan, I
            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 1.40MB storage
COMPUTER: Apple Macintosh II
OPERATING SYSTEM: Macintosh OS 7.1
SOFTWARE: Microsoft Word 5.1a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/
FILING DATE: 07-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: MURRAY, MARK J.; KELLY, JAMES D.
TITLE OF INVENTION: BIOLOGICALLY ACTIVE MOSAIC PROTEINS
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 926,149
FILING DATE: 05-AUG-1992
APPLICATION NUMBER: 379,239
FILING DATE: 11-JUL-1989
APPLICATION NUMBER: 941,970
FILING DATE: 15-DEC-1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                               STATE: Calif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 RPTQV-----QLRPVQVRKIEIVRKKPIFKKAT-VTLEDHLACKC
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FILING DATE: 3-AUG-1986
APPLICATION NUMBER: 705,175
FILING DATE: 25-FEB-1985
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                                                                                                                                       ZIP: 92715
                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                             STREET:
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APPLICATION
                                                                                                                                                                            California
                                                                                                                                                                                                               2525 Dupont Drive
                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                 USE OF PLATELET
                                                                                                                                                                                                                                                                                             WOUND HEALING
                                                                                                                                                                                                                                                                                                               DERIVED GROWTH FACTOR IN OPHTHALMIC
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5428135-2
;Patent No.
RESULT 14
US-08-989-251-2
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TITLE OF INVENTION: PRODUCTION OF PLATELET-DERIVED GROWTH
;FACTOR B-CHAIN HETERODIMERS FROM HIGH EXPRESSION HOST CELL SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-257-494D-1
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APPLICATION NUMBER: 623,671

FILING DATE: 12-DEC-1990

APPLICATION NUMBER: 451,485

FILING DATE: 15-DEC-1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 10 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: USSN APPLICATION NUMBER: 07/842,306 FILING DATE: 26 FEB 1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
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                                                                             62
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REGISTRATION NUMBER: 25,
REFERENCE/DOCKET NUMBER:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 26 FEI CLASSIFICATION: 51
                                                                                                              63 VPSKVTKKYHEVLQLRP----KTGV---RGLHKSLTDVALEHHEECDC 103
                                                                                                                                                                                                                                 Local Similarity es 36; Conserv
                                                                                                                                                                                                                                                                                                                                                    LENGTH: 120
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TOPOLOGY: 11
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                                                                           RPTQV-----QLRPVQVRKIEIVRKKPIFKKAT-VTLEDHLACKC 100
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4: 514
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Pred. No. 0.00017;
                                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                   34; Indels
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GENERAL INFORMATION:
APPLICANT: Tekamp-Olson, Patric
                                                                                                                                                                                                                                                                                                                                                         Sequence 25, Application US/08989251 Patent No. 6017731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 16.9%; Score 105; DB 3; Length 146; Best Local Similarity 33.3%; Pred. No. 0.00021; Matches 36; Conservative 12; Mismatches 34; Indels
                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Tekamp-Olson, Patricia
TITLE OF INVENTION: METHOD FOR EXPRESSION OF
TITLE OF INVENTION: PROTEINS IN YEAST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 919 881 3175
INFORMATION FOR SEQ ID NO: ...
SEQUENCE CHARACTERISTICS:
LENGTH: 146 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 919 420 2202
TELEPAX: 910 000
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                             NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bell Seltzer IP Group of Alston
STREET: 3605 Glenwood Ave. Suite 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Spruill, W. Murray
REGISTRATION NUMBER: 32,
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MEDIUM TYPE: Floppy
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TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
TITLE OF INVENTION: PROTEINS IN YEAST
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                                                                                                                                              STREET: 300
CTTY: Raleigh
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TOPOLOGY: linear
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CLASSIFICATION:
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                                                                                                         COUNTRY: U
ZIP: 27622
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Raleigh
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                                                                                                                                                                                                                                                                                              HETEROLOGOUS
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Search completed: July Job time: 237 sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 919 420 2202
TELEFAX: 919 881 3175
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 146 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Spruill, W. Murray
REGISTRATION NUMBER: 32,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 919 420 2202
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                                                                                                   98 RPTQV-----
                                                                                                                                            63 VPSKVTKKYHEVLQLRP----KTGV---RGLHKSLTDVALEHHEECDC 103
                                                                                                                                                                                      44 IAEPAMIAECKTRTEVFEIS-RRLIDRTNANFLVWPPCVEVQRCSG---CC--NNRNVQC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/989, 251
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RESULT 1
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Best Local S
Matches 111
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18-MAR-1999;
08-NOV-1999;
                                          vurnerary, cytostatic,
antidiabetic activity a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic; antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment; angiogenesis regulator; vascularization regulator; cancer; psoriasis; rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair; tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore; venous sore; diabetic ulcer; burns; skin graft growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and tissue repair in a subject. The products of the invention are useful for preparing medicaments for treating wounds such as dermal ulcers, pressure sores, venous sores, diabetic ulcers and burns and to promote skin graft growth, tissue repair, proliferation of new blood vessels, tissue regeneration and organ repair by promoting angiogenic activity or vascularization. This sequence represents the human VEGF-X protein isolated from clones 4 and 7 described in the method of the invention.
This invention describes a novel vascular endothelial growth factor-X (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has vulnerary, cytostatic, antirheumalic, antirathritic, antipsoriatic and antidiabetic activity and acts of an angiogenesis and vascularization regulator. An antisense molecule of the invention is useful for treation preventing cancer, rheumatoid arthritis, psoriasis and diabetic
                                                                                                                                                                                                                                              New vascular endothelial growth factor protein, useful preventing diseases associated with inappropriate angiouch as cancer, rheumatoid arthritis, psoriasis and wo
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                                                                                                                                                                                                Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gordon
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This invention describes a novel vascular endothelial growth factor (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriation

vulnerary, cytostatic, antidiabetic activity a

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New vascular endothelial growth factor protein, useful for treating or preventing diseases associated with inappropriate angiogenesis activity such as cancer, rheumatoid arthritis, psoriasis and wounds -

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                                                                                                                                                                                                                                                                                                                               regulator. An antisense molecule of the invention is useful for treating or preventing cancer, rheumatoid arthritis, psoriasis and diabetic retinopathy by inhibiting angiogenic activity or inappropriate vascularization including formation and proliferation of new blood vessels, growth and development of tissues, tissue regeneration and organ and tissue repair in a subject. The products of the invention are useful for preparing medicaments for treating wounds such as dermal ulcers, pressure sores, venous sores, diabetic ulcers and burns and to promote skin graft growth, tissue repair, proliferation of new blood vessels, tissue regeneration and organ repair by promoting angiogenic activity or vascularization. This sequence represents the human 990126vegx protein used to illustrate the method of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            103 TGVSSSSGTNSGVSTNLQRISVTEHTKCDCIGRTTT
  67
                                                62
                                                                                              12
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                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBUNIT: HOMODIMER, DISULFIDE-LINKED.
SUBCELLULAR LOCATION: SECRETED BUT REMAINS ASSOCIATED TO CELLS
TO THE EXTRACELLULAR MATRIX UNLESS RELEASED BY HEPARIN (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIMILARITY).
SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CELL GROWTH. INDUCES PERMEABILITY.
                                                CVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVALEHHEECDC 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAVPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CKPRDTVVYLGEEYPESTNLQYNPRCVTVKRCSG---CCNGDGQICTAVETRNTTVTVSV 102
CVPTEEFNITMQIMRIKPHQG----
                                                                                                                                          EEVRLYS-----CTPRNFSVSIREEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNECQ
                                                                                                                                                                                             . Similarity
27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                  17.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to the EMBL/GenBank/DDBJ databases.
FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL
UCES ENDOTHELIAL PROLIFERATION AND VASCULAR
                                                                                                                                                                                             21; Mismatches
                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
INTERCHAIN (BY SIMILARITY).
INTERCHAIN (BY SIMILARITY).
INTERCHAIN (BY SIMILARITY).
N-LINKED (GLCNAC...) (POTEN
N-LINKED (GLCNAC...) (POTEN
N-) 9EBB6AB1A9D5DCA4 CRC64;
                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                              Score 108.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Craniata; Veriebrata; Euteleostomi; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
  -QHIGEMSFLQHSKCEC
                                                                                                                                                                                           e 108.5; DB 1;
. No. 0.00016;
ismatches 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
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  103
                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                              Length 164;
                                                                                                                                                                                                                                                                                                                                                (POTENTIAL)
                                                                                                                                                                                             17;
                                                                                                                                                                                             Gaps
                                                                                                                                               5
                                                                                                                                                                                             S
20
                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                     SITE
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  16
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RESULT

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RT TIGHTLIFICATION OF THREE TYPES OF PDGF-A Chain gene transcripts in right fication of three types of pDGF-A chain gene transcripts in RT rabbit vascular smooth muscle and their regulated expression during RT development and by angiotensin II.";

RT Biochem. Biophys. Res. Commun. 184:811-818(1992).

RL Biochem. Biophys. Res. Commun. 184:831-818(1992).

CC -I- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS.

CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS.

CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS.

CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE.

CC IN STIMULATING ADJACENT CELLS TO GROW AND PHEREBY HEAL THE WOUND.

CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.

CC IN SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN.

CC IN SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN.

CC IN TRANSFORMATION PROCESSES.

CC INDUCTION: THE FORM A3 IS SELECTIVELY INDUCED BY ANGIOTENSIN II.

CC IN MISCELLANDOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A_RABIT
PDGA_RABIT
P34007;
01-FEB-1994
                                                                                                                                                                                                                              DISULFID
DISULFID
DISULFID
DISULFID
                                                                                                                                                                              CARBOHYD
VARSPLIC
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF PIR; JS0735, JS0735. P1R; PS0387, PS0387. PIR; JN0248; JN0248. JN0248. JN0248. JN0248. ISSP; P01127; IPDG. InterPro; IPR000072; -. InterPro; IPR002400; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-CCT-2000 (Rel. 40, Last annotation update)
PLATELET-DERIVED GROWTH FACTOR, A CHAIN PRECURSOR (PDGF A-CHAIN)
                                                                                                                                                                                                                                                                                                                                                                                    PRINTS; PR00438; GFCYSKNOT.
PROSITE; PS00249; PDGF_1; 1.
PROSITE; PS50278; PDGF_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nakahara K.-I., Nishimura H., K. Ohkubo A., Yazaki Y., Nagai R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Mammalia; Eutheria;
                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00341; PDGF; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PDGF RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oryctolagus
                                                                                                                                                                   VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-92246970;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-Vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PDGF-1).
98
                              CTPRNFSVSI-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYH 72
 CKTRTVIYEIPRSQVDPTSANFLIWPPCVEVKRCTG---CC--NTSSVKCQPSRV--
                                                           . Similarity
32; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cuniculus (Rabbit).
Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                   158
158
131
131
135
135
136
136
199
                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                     Mitogen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   smooth
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89
213
162
179
181
125
136
136
198
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                                                                      17.48; 32.38;
                                                                                                                                      24005
                                                                                                                                                                                                                                                                                                                                                                     Growth
                                                                                                                                      M.
                                                                                                                                 INTERCHAIN (BY SIMILARITY).

INTERCHAIN (BY SIMILARITY).

N-LINKED (GLCMACC...) (POTENTIAL).

GRR -> DVR (IN ISOFORM A1).

MISSING (IN ISOFORM A1).

RRRESGKKRKKRKRLRPT -> TLLPAPGGVHPQGCLRAHDG
COSSRNHMQALGWKKM (IN ISOFORM A3).

MW; 28A9B7E50487F4C5 CRC64;
                                                                                                                                                                                                                                                           REMOVED BY PROTEOLYSIS (BY SIMILARITY).
PLATELET DERIVED GROWTH FACTOR, A CHAIN.
RECEPTOR BINDING SITE (POTENTIAL).
BY SIMILARITY.
BY SIMILARITY.
                                                                           Pred.
                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                     factor; Platelet; Alternative splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kuro-O M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Leporidae;
                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                          SIMILARITY
                                                                      ± 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     213
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                                                                                         DB
                                                                           00023;
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                                                                                      Length 213;
                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GROWTH FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Iwase M.,
                                                            12;
   Ė
                                                            Gaps
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73

EVLOLRPKTGVRGLHKSLTDVALEHHEECDCVCRGSTGG

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RESULT
VEGB_HU
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                                                       Matches
                                                                      Query Match
Best Local
                                                                                                                MIM; 601398; ...
MIM; 601398; ...
InterPro; IPR000072; ...
InterPro; IPR000072; ...
Pfam; PF00341; PDGF; 1; 1.
PROSITE: PS00249; PDGF_2; 1.
PROSITE: PS50278; PDGF_2; 1.
PROSITE: PS50278; PDGF_2; 1.
POTENTIAL.
Mitogen; Growth factor; Signal; Heparin-binding.
Mitogen; Growth factor; Mitogen; Mitog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VEGB_HUMAN
P49765;
                                                                                                                                                                                                                                                                                                                                                                                  the European Bloinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SUBCELLULAR LOCATION: SECRETED BUT REMAINS ASSOCIATED TO CELLS
TO THE EXTRACELLULAR MATRIX UNLESS RELEASED BY HEPARIN.
-!- TISSUE SPECIFICITY: EXPRESSED IN ALL TISSUES EXCEPT LIVER.
HIGHEST LEVELS FOUND IN HEART, SKELETAL MUSCLE AND PANCREAS.
-!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hayward N., Weber G.;

"Cloning and characterization of a novel human gene
"ascular endothelial growth factor.";

Genome Res. 6:124-131(1996).

-!- FUNCTION: GROWTH FACTOR FOR ENDOTHELIAL CELLS.

-!- SUBUNIT: HOMODIMER, DISULFIDE-LINKED. CAN ALSO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VEGFB OR VRr.
Homo sapiens (Human).
""Varvota; Metazoa; Chordata; "
"""heria; Primates;
                                                                                                                                                                                                                                                                                                            EMBL; U48801; AAB06274.1; -. EMBL; U43369; AAA91463.1; -. HSSP; P15692; 1VPF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=97077124; PubMed=8919691;
Grimmond S., Lagercrantz J., Drinkwater
Pollock P., Gotley D., Carson E., Rakar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Olofsson B., Pajusola K., Kaipainen A., von Euler G., Joukov Saksela O., Orpana A., Pettersson R.F., Alitalo K., Eriksson "Vascular endothelial growth factor B, a novel growth factor endothelial cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-1996
01-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VASCULAR ENDOTHELIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             150
                   15 SCTPRNFSVSIREELKRT-DTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WITH VEGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RSVKVAKVEYVRKKPK-LKEVQVRLEEHLECACAASSAG
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                                                     Similarity 30.0
27; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Rel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34, Created)
34, Last sequence update)
40, Last annotation update)
,IAL GROWTH FACTOR B PRECURSOR (VEGF-B) (VEGF RELATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sci.
                                                                      16.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U.S.A. 93:2576-2581(1996).
                                                     17;
                                                     Score 105; DB 1; Pred. No. 0.00042; 7; Mismatches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Ve
Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human gene related
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Silins G., Townson
Nordenskjoeld M., 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                                                                       Length 188
                                                       Indels
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FORM H
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    wnson S.,
                                                       12;
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                                                       Caps
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RESULT 5
PDGA_XENLA
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01-JAN-1990
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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P13698;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEIC ACIDS RES. 18:680-680(1990).

-I- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND:
-I- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (AD AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.
Glycoprotein;
Signal.
                                                  PRINTS; PRO0438; GFCYSKNOT.
PROSITE; PS00249; PDGF_1; 1.
PROSITE; PS50278; PDGF_2; 1.
                                                                                                                                                                                                                                                                                 EMBL; M23237; AAA49927.1; -. EMBL; M23238; AAA49928.1; -. EMBL; X17545; CAA35583.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=90175018; pubMed=2308861;
Bejcek B.E., Li D.Y., Deuel T.F.;
"Nucleotide sequence of a cDNa cl'
growth factor A-chain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xenopus embryos.";
Science 241:1223-1225(1988)
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MEDLINE-88321676; PubMed-3413486;
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NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                       InterPro; IPR000072; -.
InterPro; IPR002400; -.
Pfam; PF00341; PDGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mercola M., Melton D.A., Stiles C.D.; "Platelet-derived growth factor A chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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Xenopus laevis (African clawed frog).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALTERNATIVE PRODUCTS: 2 ISOFORMS; A LONG FORM (SHOWN HERE) AND I SHORT FORM; ARE PRODUCED BY ALTERNATIVE SPLICING. THE LONG FORM CONTAINS A BASIC INSERT WHICH ACTS AS A CELL RETENTION SIGNAL. MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PDGF RECEPTOR
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(Rel. 13, Last sequence update)
(Rel. 40, Last annotation updat
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                                Mitogen; Growth
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                             Platelet;
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
21-JUL-1986 (Rel. 40, Last annotation update)
PLATELET-DERIVED GROWTH FACTOR, B CHAIN PRECURSOR (PDGF-2) (C-SIS) (BECAPLERMIN).
PDGFB OR SIS.
SEQUENCE FROM N.A.

MEDLINE-85296313; PubMed-4033772;

Collins T., Ginsburg D., Boss J.M.,

"Cultured human endothelial cells extended the color of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Transforming potential of platelet-derived growth fa Science 225:636-639(1984).
                                                                                                                                                                                                                                                                                        SEQUENCE OF 22-241 FROM MEDLINE-84205633; Pubmed
                                                                                                                                                                                                                                                                                                                                                                 Rao C.D., Igarashi H., Chiu I.-M., Robbins K.C., Aaronson S.A.; "Structure and sequence of the human c-sis/platelet-derived growth factor 2 (SIS/PDEF2) transcriptional unit."; proc. Natl. Acad. Sci. U.S.A. 83:2392-2396(1986).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PDGB_HUMAN
P01127; P7
                                                                                                                                                                                   "Nucleotide sequence analysis identifies proto-oncogene as a structural gene for practor ".
                                                                                                                                                                                                                                                                         Chiu
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE-86205961;
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PubMed=6327048;
E.P., Givol D.,
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Primates;
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PLATELET-DERIVED (
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Pred. No. 0
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Catarrhini; Hominidae
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-> R (IN REF. 2).
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M., Orkin S.H., Pober J.S.;
s express platelet-derived
structural analysis.";
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                                                                                                                                                                                                platelet-derived
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                                                                                                                                                                                                                         C-SiS
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       MEDIINE-84236121; PubMed-6329745;
Johnsson A., Heldin C.H., Wasteson A.,
Huang J.S., Seeburg P.H., Gray A., Ul.
Stroobant P., Waterfield M.D.;
"The C-51s gene encodes a precursor of
platelet-derived growth factor.";
EMBO J. 3:921-928(1984).
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Nucleic A
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MEDLINE-83197379; PubMed-6844921;
Antoniades H.N., Hunkapiller M.W.
"Human platelet-derived growth fa
acid sequence.";
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MEDLINE-87217119; PubMed-3472769;
Rao C.D., Igarashi H., Pech M.W.,
"Oncogenic potential of the human
transcriptional unit.";
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George-Nascimento C., Westermark B., Heldin C.-H.;
"Assignment of interchain disulfide bonds in platelet-derived growth
"Assignment of evidence for agonist activity of monomeric PDGF.";
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van den Ouweland A.M.W., van Groningen J.J.M., Sc

van Neck H.W., Bloemers H.P.J., van de Ven W.J.M.

"Genetic organization of the c-sis transcription
Nucleic Acids Res. 15:959-970(1987).
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01-OCT-1989 (Rel. 12, Last sequence update)
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PLATELET-DERIVED GROWTH FACTOR, B CHAIN PRE
(PDGFB) (C-SIS) (PDGF-2).
                                                                                                                                                        Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.

-i- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.

-i- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS, HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.
EMBL;
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P15692;
01-APR-1990 (Rel. 14, Created)
01-APR-1990 (Rel. 14, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR
PERMEABILITY FACTOR) (VPF).
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SIGNAL
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MEDLINE=90069608; PubMed=2479986;
Leung D.W., Cachianes G., Kuang W.-J.,
"Vascular endothelial growth factor is
                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
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PROSITE; PS00249; PDGF_1; 1
PROSITE; PS50278; PDGF_2; 1
SEQUENCE FROM N.A. MEDLINE-92231879;
                                                         SEQUENCE FROM N.A.
MEDLINE-91268072; PubMed-1
Tischer E., Mitchell R., H
Fiddes J.C., Abraham J.A.;
                                                                                                                                      Keck P.J., Hauser Connolly D.T.;
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InterPro; IPR000072; -.
InterPro; IPR002400; -.
Pfam; PF00341; PDGF; 1.
                                                                                                                                                          MEDLINE-90069609;
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                             human gene for vascular endothelial growen forms are encoded through alternative iol. Chem. 266:11947-11954(1991).
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ell R., Hartman
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S.D., Krivi G.,
 PubMed-1567395
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MEDLINE=90062112; PubMed=2584205;
Connolly D.T., Olander J.V., Heuvelman (
Siegel N., Haymore B.L., Leimgruber R.,
"Human vascular permeability factor. Isc
J. Biol. Chem. 264:20017-20024(1989).
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de Vos A.M.;
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Kochs G., Marme D., Hug H., Weich H.A.;
"Synthesis and assembly of functionally
endothelial growth factor homodimers in
                                                                                                                                           endothelial growth factor.";
Structure 6:637-648(1998).
-!- FUNCTION: GROWTH FACTOR
                                                                                                                                                                                                                                            "1H, 13C, and 15N backbone assignment and receptor-binding domain of vascular endoth Protein Sci. 6:2250-2260(1997).
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Muller Y.A., Christinger H.W., Keyt B.A., de Vos A.M.;
"The crystal structure of vascular endothelial growth factor (VEGF)
refined to 1.93-A resolution: multiple copy flexibility and recepto
                                                                                                                                                                                      MEDLINE=98298440; PubMed=9634701;
Fairbrother W.J., Champe M.A., Christinger
Starovasnik M.A.;
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Fairbrother W.J., Keenan C.J.,
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Muller Y.A., Li B.,
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                                       SIMILARITY).
ALTERNATIVE PRODUCTS: FOR ALTERNATIVE SPLICING OF VEGF-189 AND VEGF-215.
                               SIMILARITY: BELONGS TO THE PDGF/VEGF
                                                                                      SUBUNIT: HOMODIMER, DISULFIDE-LINKED SUBCELLULAR LOCATION: SECRETED BUT RITO THE EXTRACELLULAR MATRIX UNLESS RI
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Champe M.A., Christinger
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. 94:7192-7197(1997).
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, Cochran A.G., Cum.,
Meng G., de Vos A.M.
...en VEGF and
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Biochim. Biophys. Acta 1173:294-302(1993)
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MEDLINE-93305723; PubMed-8318539;
Herren B., Weyer K.A., Rouge M., Loetso
"Conservation in sequence and affinity
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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MISCELLANBOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO 7 PROF. RECEPTOR.
                                                                                                                                                                      ween the Swiss Institute of Bioinformatics Institute
                                                                                                                                                                                                                                     SIMILARITY: BELONGS
L06894; AAB59693.1;

Z14120; CAA78490.1;

D10106; BAA00987.1;

L106238; AAA41932.1;

L106238; AAA41932.1;

S57884; AAB26134.2;

P01127; IPDG.
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Physiol. 264:L100-L106(1993).
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                                                                                                            email to license@isb-sib.ch]
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Sciurognathi; Muridae;
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Glycoprotein;
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Scott
                                                                                                   MEDIINE=88174698; PubMed=2832727;
ROTSIMEN F., Bywater M., Knott T.J., Scott J., Betsholtz C.;
"Structural characterization of the human platelet-derived factor A-chain cDNA and gene: alternative exon usage predic different precursor proteins.";
Mol. Cell. Biol. 8:571-577(1988).
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        "cDNA sequence and chromos growth factor A-chain and Nature 320:695-699(1986).
                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
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gene structure,
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EMBL; M20492;
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EMBL; M19988;
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MEDLINE-87287247; PubMed-3614363;
Tong B.D., Auer D.E., Jaye M., Ka
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01-CT-1996 (Rel. 34, L)

01-CCT-2000 (Rel. 40, L)

PLATELET-DERIVED GROWTH
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SEQUENCE
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MIM; 173430;
SEQUENCE FROM N.A. (LONG AND SHOR STRAIN-BALB/C; MEDLINE=94031105; Pubmed=1340209; ROTSMAN F., Betsholtz C.; "Characterization of the mouse PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00249; PDGF_1; 1.
PROSITE; PS50278; PDGF_2; 1.
Glycoprotein; Mitogen; Growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000072; -.
InterPro; IPR002400; -.
Pfam; PF00341; PDGF; 1.
                                                                                                                                     Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                  NCBI_TaxID-10090;
                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                    PDGFA
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                                                                                                                                                                                                                  (PDGF-1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTPRNFSVSI-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQCVPSKV---TK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KYHEVLQLRPKTGVRGLHKSLTDVALEHHEECDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32; Conservative
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                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                     . 17, Created)
. 34, Last sequence update)
. 40, Last annotation update)
GROWTH FACTOR, A CHAIN PRECURSOR
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  mouse PDGF A-chain gene. Evolutionary
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Pred. No. 0.00
12; Mismatches
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INTERCHAIN.
INTERCHAIN.
N-LINKED (GLCNAC.
N-LINKED (IN SHORE
GRP -> DVR (IN SHORE ISI
MISSING (IN SHORE ISI
RAH -> TRD (IN REF.
A): 48633DDE558EFA43
                                                                               SHORT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REMOVED BY PROTEOLYSIS.
PLATELET-DERIVED GROWTH FACTOR, A
RECEPTOR BINDING SITE (POTENTIAL)
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                       Craniata; Vertebrata;
Sciurognathi; Muridae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           factor;
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                                                                               FORMS)
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SHORT ISOFORM).
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                                                                                                                                         Muridae;
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                                                                                                                                                                                                                                       (PDGF
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                                                                                                                                       Euteleostomi;
; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   211;
                                                                                                                                                                                                                                       A-CHAIN)
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      CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEALS THE WOUND.

-!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.

-!- ALTERNATIVE PRODUCTS: 2 ISOFORMS; A LONG FORM (SHOWN HERE) AND A SHORT FORM; ARE PRODUCED BY ALTERNATIVE SPLICING. THE LONG FORM CONTAINS A BASIC INSERT WHICH ACTS AS A CELL RETENTION SIGNAL.

-!- MISCELLANDOUS: A -A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE PDGF RECEPTOR.
                                                                                                                                                                                                                                                                                                                                                                                            PIR; A37359; A37359.
HSSP; P01127; 1PDG.
MGD; MGI:97527; Pdgfa.
InterPro; IPR000072; ...
InterPro; IPR002400; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conservation of splicing.";
Growth Factors
    PROPEP
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SITE
DISULFID
DISULFID
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DISULFID
CARBOHYD
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                                                                                                                                                                                                                                                         Signal
SIGNAL
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EMBL;
EMBL;
EMBL;
PIR;
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                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00341; PDGF; 1. PRINTS; PR00438; GFCYSKNOT.
                                                                                                                                                                                                                                                                                                                PROSITE; PS00249; PDGF_1; PROSITE; PS50278; PDGF_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S66873; AAB28740.2

S668686; AAB28740.2

S66870; AAB28740.2

S66871; AAB28740.2

S66872; AAB28740.2

S66874; AAB28740.2

S66875; AAB28741.2

S66876; AAB28741.2

S66876; AAB28741.2

S66877; AAB28741.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
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      of gene structure,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N.A.
                                                                                                                                                                                                                                                                                                  Mitogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6:303-313(1992).
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                                                                                                                                                                                                                                                                                                    Growth
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REMOVED BY PROTEOLYSIS.
PLAPELET-DERIVED GROWTH FACTOR,
RECEPTOR BINDING SITE (POTENTIAL
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
INTERCHAIN (BY SIMILARITY).
INTERCHAIN (BY SIMILARITY).
INTERCHAIN (BY SIMILARITY).
N-LINKED (GLCNAC. .).
GRR -> DVR (IN SHORT ISOFORM).
MISSING (IN SHORT ISOFORM).
V -> I (IN REF. 2).
V -> O (IN REF. 1).
                                                                                                                                                                                                                                                                                                factor;
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                                                                                                                                                                                                    GROWTH FACTOR,
SITE (POTENTIAL
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RESULT 12
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Best Local S
Matches 32
                                                                                                                                                                                                          Query Match
Best Local S
Matches 36
                                                                                                                                                                                                                                                                                                   InterPro; IPRO00072; ...
InterPro; IPRO02400; ...
Pfam; PF00341; PDGF; I.
PRO031TE; PR00438; GFCYSKNOT.
PROSITE; PS00249; PDGF_1; 1.
PROSITE; PS50278; PDGF_2; 1.
Transforming protein; Oncogene; GI
SEQUENCE 226 AA; 25411 MW; A16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.

MEDLINE-83144004; PubMed-6298772;

Devare S.G., Reddy E.P., Law J.D., Robbins K.C., Aaronson S.A.;

"Nucleotide.sequence of the simian sarcoma virus genome:
demonstration that its acquired cellular sequences encode the
transforming gene product p2851s.";

Proc. Natl. Acad. Sci. U.S.A. 80:731-735(1983).

-1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; V01201; CAA24516.1; ALT_INIT.
PIR; A01381; TYMVSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Viruses; Retroid
NCBI_TaxID=11817;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
PDGF-RELATED TRANSFORMING PROTEIN P28-SIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSSP; P01127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Simian sarcoma virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSIS_SMSAV
P01128; 041283;
                                                      127
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13
                                                      RPTQV----
                                                                                        VPSKVTKKYHEVLQLRP----KTGV---RGLHKSLTDVALEHHEECDC
                                                                                                                                                   KVAKVEYVRKKPKLKEV----QVRLEEHLECAC 179
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                                                                                                                               VAEPAMIAECKTRTEVFEIS-RRLIDRTNANFLVWPPCVEVQRCSG--
                                                                                                                                                                                                          Similarity 33.:
36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1PDG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           viruses;
                                                      ·QLRPVQVRKIEIVRKKPIFKKAT-VTLEDHLACKC
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                                                                                                                                                                                                                              16.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Retroviridae; Mammalian type
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                                                                                                                                                                                                          12;
                                                                                                                                                                                                          Score 104; DB
Pred. No. 0.00
12; Mismatches
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Pred. No. 0.00
l2; Mismatches
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IID VEGH_OREN2
AC 01-021
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SIGNAL
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P 01-FEB-1996 (Rel. 33, Created)

T 01-FEB-1996 (Rel. 33, Last sequence update)

T 01-CT-1996 (Rel. 34, Last annotation update)

VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VI
                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-2090 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR HOMOLOG PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-94076465; PubMed-8254780;
Lyttle D.J., Fraser K.M., Fleming
"Homologs of vascular endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSSP; P15692; 1VPF.
InterPro; IPR000072; -.
Pfam; PF00341; PDGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entities requires a license agreement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7. Virol. 68:84-92(1994).
--- FUNCTION: INDUCES ENDOTHELIAL PROLIFERATION.
--- SUBUNIT: HOMODIMER, DISULFIDE-LINKED (BY SIMILARITY).
--- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                poxvirus orf virus."
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PS50278; PDGF_2; 1.
Growth factor; Glycoprotein;
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dsDNA viruses,
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INTERCHAIN (BY SIMILARITY).
N-LINKED (GLCNAC. . .) (POTEN
M; 917C0F6883030C39 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                    Score 102.5;
Pred. No. 0.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Poxviridae; Chordopoxvirinae;
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h factor are
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Eukaryota;
Mammalia; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                         VEGC_HUMAN STANDARD: PRT: 419 AA.
P49767:
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-2000 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR C PRECURSOR (VEGF-C) (VASCULAR ENDOTHELIAL GROWTH FACTOR RELATED PROTEIN) (VRP) (FLT4 LIGAND) (FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long modified and this statement is not removed.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia; Eutheria;
NCBI_TaxID=9823;
                                                                                                                                                                                                                HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entities requires a license agreement (See http://www.isb-sib.ch/announce/
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Eukaryota;
                    Homo sapiens
                                        VEGFC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT: HOMODIMER, DISULFIDE-LINKED (BY SIMILARITY) SUBCELLULAR LOCATION: SECRETED BUT REMAINS ASSOCIATE: TO THE EXTRACELLULAR MATRIX UNLESS RELEASED BY HEPAR. SIMILARITY).
SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWT:
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P15692;
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TE; PS00249; pDGF_1; 1.
TE; PS50278; pDGF_2; 1.
en; Growth factor; Glycoprotein;
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24; Conservative
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Metazoa;
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                    (Human)
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2VGH.
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  Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16
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VASCULAR ENDOTHELIAL GROWTH F
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INTERCHAIN (BY SIMILARITY).
INTERCHAIN (BY SIMILARITY).
N-LINKED (GLCNAC. . .) (POTEN
M; 04D40BBD7913047F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 102.5;
Pred. No. 0.00
20; Mismatches
Craniata;
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0.00078;
nes 34;
  Vertebrata;
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porcine
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Sus.
Euteleostom1;
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                                                                             LIGAND) (FLT4-
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MEDLINE=96312526; PubMed=8700872;

Lee J., Gray A., Yuan J., Luoh S.-M., Avraham H., Wood W.I.;

Lee J., Gray A., Yuan J., Luoh S.-M., Avraham H., Wood W.I.;

"Vascular endothelial growth factor-related protein: a ligand specific activator of the tyrosine kinase receptor Flt4.";

Proc. Natl. Acad. Sci. U.S.A. 93:1988-1992(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Joukov V., Pajusola K., Kaipainen Saksela O., Kaikkinen N., Alitalo EMBO J. 15:1751-1751(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., AND SEQUENCE OF 103-120. MEDLLNE-96178224; Pubmed-8617204; Joukov V., Pajusola K., Kaipainen A., Chilov Saksela O., Kaikkinen N., Alitalo K.; "A novel vascular endothelial growth factor, the Fit4 (VEGFR-3) and KDR (VEGFR-2) receptor EMBO J. 15:290-298(1996).
                                                                                                                                                                                                                         InterPro; IPR000072;
InterPro; IPR002400;
Pfam; PF00341; PDGF;
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                                                                                                                                                                                                                                                                                                                                                   use by non-profit institutions as long a modified and this statement is not removed.
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Fitzgerald M., Scaltre
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Wood C.R.;
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PTM: PROBABLY PROTEOLITICALLY PROCESSED IN THE C-TERMINUS.
SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS
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 Similarity
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PS50278; PDGF_2;
Growth factor; G1
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Scaltreto H., Weich N., Neben S., Finnerty
ng J., Nickbarg E., Gassaway R., Turner K.,
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OM protein - protein search, using sw model
                                                                              GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
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Run on: July 3, 2001, 10:27:25; Search time 18.61 Seconds (without alignments) 454.346 Million cell updates/sec

US-09-541-752-2_COPY_235_345
621
1 VVDLNLTTEEVRLYSCTPRN......DVALEHHEECDCVCRGSTGG 111

Scoring table:

Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5

219241 segs, 76174552 residues

Searched:

Total number of hits satisfying chosen parameters: 219241

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_68:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* pir1: *
pir2: *
pir3: *
pir4: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	89	7	6	5	4	w	2		NO.	Result
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Query Match Best Local Similarity

17.4%;

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Length 166;

ALIGNMENTS

RESULT 2 190248 190248 190248 C; Species: Oryctolagus cuniculus (domestic rabbit) C; Species: Oryctolagus cuniculus (domestic rabbit) C; Accession: JN0248 C; Accession: JN0248 R; Nakahara, K; Nishimura, H; Kuro-o, M; Takewaki, S; Iwase, M; Ohkubo, A;; Yazak Biochem. Biophys. Res. Commun. 184, 811-818, 1992 A; Title: Identification of three types of PDGF-A chain gene transcripts in rabbit vas A; Reference number: JN0248 A; Accession: JN0248 A; Accession: JN0248 A; Residues: 1-166 <nak> C; Superfamily: platelet-derived growth factor F; 23-166/Product: platelet-derived growth factor A3 chain #status predicted <mat></mat></nak>	Query Match 18.4%; Score 114.5; DB 2; Length 148; Best Local Similarity 30.2%; Pred. No. 0.00028; Matches 29; Conservative 19; Mismatches 43; Indels 5; Gaps 3; Qy 16 CTPRNFSYSIREEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEV 74	RESULT 1 D49530 16K vascular endothelial growth factor homolog A2R - Orf virus C:Species: Orf virus C:Species: O7-Apr-1994 #sequence_revision 18-Nov-1994 #text_change 08-Oct-1999 C:Accession: D49530 R:Lyttle, D.J.; Fraser, K.M.; Fleming, S.B.; Mercer, A.A.; Robinson, A.J. Virol. 68, 84-92, 1994 A; Title: Homologs of vascular endothelial growth factor are encoded by the poxvirus o A; Reference number: A49530; MUID:94076465 A; Reference number: A49530; MUID:94076465 A; Contents: NZ7 A; Accession: D49530 A; Status: preliminary A; Molecule type: DNA A; Residues: 1-148 < LYT> A; Rocession: GB:S67522; NID:9456900; PIDN:AAB29223.1; PID:9456902 A; Note: sequence extracted from NCBI backbone (NCBIN:141422, NCBIP:141426)

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platelet-derived growth factor chain Al precursor - rabbit C;Species: Oryctolagus cuniculus (domestic rabbit) C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 27-Jun-1994 C;Accession: JS0735
R;Nakahara, K; Nishimura, H.; Kuro-o, M.; Takewaki, S.; Iwase, M.; Ohkubo, A.; Yazaki, Biochem. Biophys. Res. Commun. 184, 811-818, 1992
A;Title: Identification of three types of PDGF-A chain gene transcripts in rabbit vascui A;Reference number: JN0248; MUID:92246970
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A;Cross-references: GB:M23238; NID:g214650; PIDN:AAA49928.1;
C;Superfamily: platelet-derived growth factor
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platelet-derived growth N;Alternate names: PDGF C;Species: Homo sapiens
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Nucleic Acids Res. 18, 680, 1990
A;Title: Nucleotide sequence of a cDNA clone
A;Reference number: S08220; MUID:90175018
A;Reference S08220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-226 <MER>
A; Cross-references: GB:M23237; NID:g214648; P:C; Superfamily: platelet-derived growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Mercola, M.; Melton, D.A.; Stiles, C.D.
Science 241, 1223-1225, 1988
A;Title: Platelet-derived growth factor A chain
A;Reference number: I51550; MUID:88321676
A;Accession: I51550
A;Status: preliminary; translated from GB/EMBL/D
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        platelet-derived growth factor A chain long form precursor - African clawed C;Species: Xenopus laevis (African clawed frog) C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999 C;Accession: IS1550
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A; Residues: 1-215 <BEJ>
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Best Local S
Matches 33
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Best Local
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153
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                                                                                                                                                                                                                                             16 CTPRNFSVSI-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYH 72
                                                                                                                                                                 CKTRTVIYEIPRSQIDPTSANFLIWPPCVEVKRCTG---CC--NTSSVKCQPSRI--
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33; Conserv
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                                                  -EVLQLRPKTGVRGLHKSLTDVALEHHEECDCVCRGST 109
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    -LKEVL--VRLEEHLECTCTANSNS 190
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Pred. No. 0.0034;
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factor chain B precursor (validated) B-chain; PDGF-B; PDGF-II; PDGF-related

transforming

protein

(man)

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A;Title: Human platelet derived growth factor (PDGF): amino-t A;Reference number: A94271; MUID:83197379

A;Reference number: A94271

A;Molecule type: protein
A;Residues: 82-100, 'E', 102-104, 'C', 106, 'C', 108-110 <ANT>
A;Residues: 82-100, 'E', 102-104, 'C', 106, 'C', 108-110 <ANT>
A;Residues: 82-100, 'E', 102-104, 'C', 106, 'C', 108-110 <ANT>
R;Waterfield, M.D.: Scrace, G.T.: Whittle, N.; Stroobant, P.;
Nature 304, 35-39, 1983

A;Title: Platelet-derived growth factor is structurally related the second company of the seco
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A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-241 <RNO1>
A;Cross-references: GB:M12783; GB:M16288; NID:g338210; PIDN:AAA60553.1;
A;Cross-references: GB:M12783; ABA60553.1;
A;Cross-references: GB:M12783; ABA60553.1;
A;Cross-references: GB:M12783; ABA60553.1;
A;Cross-references: GB:M12783; ABA60553.1;
A;Cros
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Nature 316, 748-750, 1985
A;Title: Cultured human endothelial cells
..oaference number: A93366; MUID:85296313
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A; Residues: 17-20, 'RQ', 22-241 <CHI>
A; Residues: 17-20, 'RQ', 22-241 <CHI>
A; Cross-references: GB: KO1917; NID: g338197
A; Rao, C.D.; Igarashi, H.; Chiu, I.M.; Robbins, K.C.;
Proc. Natl. Acad. Sci. U.S. A. 83, 2392-2396, 1986
A; Title: Structure and sequence of the human c-sis/pla
A; Reference number: A23532; MUID: 86205961
A; Accession: A23532
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A; Residues: 1-241 <CDL>
A; Cross-references: GB:X02811; NID:g35371;
R; Weich, H.A.; Sebald, W.; Schairer, H.U.;
FEBS Lett. 198, 344-348, 1986
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A:Title: Transforming potential of human c-sis A:Reference number: A94276; MUID:84250225
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C; Accession:
                                        A; Molecule type:
A; Residues: 82-9
                                                                                                                                                                                                                                        R;Lu, K.V.; Rohde, M.F.; Thomason, A.R.; Kenney, W.C.; Blochem. J. 309, 411-417, 1995
A;Title: Mistranslation of a TGA termination codon as ta;Reference number: S56115; MUID:95351967
                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 'Q', 22-241 <JOS2>
R; Lu, K.V.; Rohde, M.F.; Thoma
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Science 220, 963-965, 1983
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A; Residues: 26-241 <WEI>
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A;Accession: A25141
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A;Title: The human osteosarcoma cell line
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A; Residues: 1-241 <JOS1>
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                                                                                                                                                                                                S56115
3
Robbins,
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K.C.;
Aaronson,
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Hoppe, J.
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A; Residues: 'SLSL',17-20,'RQ',22-241 <JOH>
A; Cross-references: GB:X00556; GB:X00559; GB:X00560; CR; Dirks, R.P.H.; Onnekink, C.; Jansen, H.J.; de Jong, Nucleic Acids Res. 23, 2815-2822, 1995
A; Title: A novel human c-sis mRNA species is transcrib A; Reference number: S58382; MUID:95388493
A; Accession: S58383
                                                                                                                                F:21-81/Domain: amino-terminal propeptide #Status predicted <PRO>
F:82-190/Product: platelet-derived growth factor chain B #Status experimental <MAT>
F:82-190/Product: platelet-derived growth factor chain B #Status experimental <MAT>
F:191-63/Region: receptor binding #Status predicted <CTP>
F:191-241/Domain: carboxyl-terminal propeptide #Status predicted <CTP>
F:97-141,130-178,134-180/Disulfide bonds: #Status experimental
F:124/Disulfide bonds: interchain (to 133 in homodimeric form) #Status experimental
F:124/Disulfide bonds: interchain (to chain A-132 in heterodimeric form) #Status experimental
F:133/Disulfide bonds: interchain (to 124 in homodimeric form) #Status experimental
F:133/Disulfide bonds: interchain (to chain A-124 in heterodimeric form) #Status pred
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A; Molecule type: mRNA
A; Residues: 'MFIMGL', 22-200 <DIR>
A; Cross-references: EMBL: X83705; NID: 9951023; F
A; Cross-references: EMBL: X83705; NID: 9951023; F
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Nucleic Acids Res. 13, 5007-5018, 1985
A;Title: Nucleotide sequence of transforming
A;Reference number: I37266; MUID:85269623
A;Accession: I37266
A;Status: translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: GDB:120709; OMIM:190040
A;Map position: 22q12.3-22q13.1
A;Introns: 57/3; 94/1; 192/3; 241/1
C;Complex: homodimer; heterodimer (see PIR:PFHUG1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Note: mutagenized recombinant sequence C;Comment: Platelet-derived growth factor, a C;Genetics:
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A;Title: The 5' untranslated equence of the A;Reference number: I57635; MUID:88094398
A;Accession: I57635
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A; Residues: 'M', 82-241 <COO>
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EMBO J. 3, 921-928, 1984
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A; Residues: 1-241 < RAT>
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A; Residues: 1-20 < RAO2>
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                                                      Match
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. Similarity
36; Conser
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Westermark, B.; Deuel, T.F.;
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, L.J.; Green, D.
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R.; Price, M.J.;
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A;Title: Genetic organization of the C-sis transcription unit.
A;Reference number: A26402; MUID:87146463
                                                        A:Molecule type: mRNA
A;Residues: 1-141,227-232 <HOU>
R;Tischer, E.; Mitchell, R.; Hartman,
J. Biol. Chem. 266, 11947-11954, 1991
                                                                                                                                                                                                                                                                                        Mol. Endocrinol. 5, 1806-1814, 1991
A:Title: The vascular endothelial growth factor family: identification of A:Reference number: A41551; MUID:92168017
A:Accession: A41551
A;Recession: A4159
A;Residues: 1-232 <HOUI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                  J. Biol. Chem. 266, 1194
A; Title: The human gene
                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Homo sapiens (man)
C;Date: 28-Aug-1992 #sequence_revision 28-Aug-1992 #text_change 05-Nov-1999
C;Accession: A41551; C41551; A41551; A40454; B40454; C40454; A40079; A40080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: n
A; Residues: 1-245
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A; Accession: A26402
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                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-140,'N',183-232
A; Accession: B41551
                                                                                                                                                                                                                           A;Cross-references: GB:S85192; NID:g246155; A;Accession: C41551
A;Status: nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                  R; Houck,
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                                                                                                                                             A;Status: nucleic acid sequence
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Alternate names: PDGF-related transforming protein
Species: Felis silvestris catus (domestic cat)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      146 RPTQVQLRLVQVRKIEIVRKRP-----VFKKAT-VTLEDHLACKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63 VPSKVTKKY----HEVLOLRPKTGVRGLHKSLTDVALEHHEECDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92 VAEPAMIAECKTRTEVFEVS-RRLIDRTNANFLVWPPCVEVQRCSG---CC--NNRNVQC
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                                                                                                                                                                                                                                                                                                                                                                                                                  K.A.; Ferrara, N.; Winer, J.; Cachianes, G.; Li, B.; Leung, D.W.
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35; Conser
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                   gene for vascular endothelial A40454; MUID:91268072
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                                                                                Silva,
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                                                                                                                                             conceptual
                                         Multiple
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                                                                              Fiddes,
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LQLRPKTGVRGLHKSLTDVALEHHEECDC

16

Similarity

16.8%; 27.0%;

Conservative

21;

Pred. No. 0.0 l; Mismatches Score 104.5; Pred. No. 0.

.004;

33; 2;

Indels

11;

Gaps

4

DB

Length

CTPRNFSVSIREEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEV 74

CC - - NDEGLECVPTEESNITMQI

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A;Accession: war. RNA
A;Molecule type: mRNA
A;Residues: 1-140,'N',183-232 <WEI>
A;Cross references: EMBL:X62568; NID:937658;
A;Cross-imantal source: AIDS-Kaposi's sarcoma
A;Description: promotes fluid and protein leakage from blood vessels C;Keywords: alternative splicing; analyogenesis; dimer; disulfide bond; ext F;1-232/product: vascular endothelial growth factor 206 precursor *status F;1-165,183-232/product: vascular endothelial growth factor 189 precursor F;1-41,227-232/product: vascular endothelial growth factor 121 precursor F;1-26/Domain: signal sequence *status predicted <SIC> F;101/Binding site: carbohydrate (Asn) (covalent) *status predicted
                                                                                                                                                                                                                                                                            A; Molecule type: protein
A; Residues: 27-36; 43-49, 'R'; 72-76, 'Q', 78-81; 59-71 <CON>
C; Comment: The most common of several alternatively spl
                                                                                                                                                                                                                                                                                                                                                A;Experimental source: AIDS-Kaposi's Sarcoma R;Connolly, D.T.: Olander, J.V.; Heuvelman, I. J. Biol. Chem. 264, 20017-20024, 1989
A;Title: Human vascular permeability factor. A;Reference number: A34492; MUID:90062112
A;Accession: A34492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Weindel, K.; Marme, D.; Weich, H.A.
Biochem. Biophys. Res. Commun. 183, 1167-1174,
A;Title: AIDS-associated Kaposi's sarcoma cell
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R;Leung, D.W.; Cachianes, G.; I
Science 246, 1306-1309, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Keck, P.J.; Hauser, S.D.; Krivi, G.;
Science 246, 1309-1312, 1989
A;Title: Vascular permeability factor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-140,'N', 183-232 <TI2>
A; Cross-references: GB:M63971; GB:M63972;
                                                                                                                                                                                    A; Map position:
                                                                                                                                                                                                              A;Cross-references:
                                                                                                                                                                                                                                      A; Gene: GDB: VEGF
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A; Residues: 1-140,'N', 227-232 <WE2>
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A;Accession: JQ1463
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A; Residues: 1-140,'N',183-232 <LEU>
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A; Cross-references: GB:M63971; GB:M63972;
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A;Cross-references: GB:M63971;
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                                                                                                                                                                                 ces: GDB:132244; OMIM:192240 6p21-6p12
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Kuang, W.J.; (
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A;Gene: GDB:PDGFA
A;Cross-references: GDB:120266; OMIM:173430
A:Map position: 7p22-7p22
C;Superfamily: platelet-derived growth factor
C;Keywords: alternative splicing; glycoprotein
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A; Cross references: GB:M21571;
A; Gross references: GB:M21571;
G:Genomics 13, 257-263, 1992
A; Title: Platelet-derived growt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R:Bonthron, D.T.; Morton, C.C.; Orkin, S.H.; Collins, T. Proc. Natl. Acad. Sci. U.S.A. 85, 1492-1496, 1988
A;Title: Platelet-derived growth factor A chain: gene structure, A;Reference number: A28964; MUID:88144463
A;Accession: B28964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A:Molecule type: mRNA
A;Residues: 1-63, 'TRD', 67-196 <ROR>
A;Cross-references: GB:M20488
A;Note: the authors translated the codon
C;Comment: Exon 6 is spliced out of this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       platelet-derived growth factor chain A precursor splice form 2 - C:Species: Homo sapiens (man) C:Date: 30-Jun-1989 *sequence_revision 30-Jun-1989 *text_change C:Accession: B28964: B42002; B28122
                                                                                                          C:Accession: S25096; S33764
R:Herren, B.; Weyer, K.A.; Rouge, M.; Loetscher, P.; submitted to the EMBL Data Library, July 1992
A;Description: Cross-species conservation in sequence A;Reference number: S25096
A;Accession: S25096
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Rorsman, F.; Bywater, M.; Knott, T.J; Scott, J.; Betsholtz, Mol. Cell. Biol. 8, 571-577, 1988
A;Title: Structural characterization of the human platelet-der A;Reference number: A28122; MUID:88174698
A;Accession: B28122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-196 <B
                                                                                                                                                                                                                                           platelet-derived growth factor chain A precursor C:Species: Rattus norvegicus (Norway rat) C:Date: 07-Apr-1994 #sequence_revision 07-Apr-1994
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A; Residues: 152-196 <BO2>
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R; lerren, B.;
Biochim. Biopi
...;Cross-references: EMBL:Z14120; NID:g56865; PIDN:CAA78490.1; PID:g56866
R;Herren, B.; Weyer, K.A.; Rouge, M.; Loetscher, P.; Pech, M.
Biochim. Biophys. Acta 1173, 294-302, 1993
                                                                 A; Molecule type: mRNA
A; Residues: 1-197 <HER1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: B42002
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Best Local S
Matches 32
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                                                                                                                                                                                                                                                                                                                                                                                                           151 KVAKVEYVRKKPKLKEV-----QVRLEEHLECAC 179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      alternative splicing; glycoprotein;
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34.0%;
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rzeschik, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
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Pred. No. 0.0039;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chain: confirmation of localization
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                                                                                                                                                                                                                                                                                               rat (fragment)
                                                                                                                                                                                                        Pech,
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For the major
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platelet-derived growth factor chain A precursor - human N;Alternate names: PDGF A-chain; PDGF-1; PDGF-A; platelet-derived growth factor C;Species: Homo sapiens (man) C;Date: 04-Dec-1986 #sequence_revision 04-Dec-1986 #text_change 18-Feb-2000 C;Accession: A28964; S47564; A42002; A01379; S00173; A28122 R;Bonthron, D.T.; Morton, C.C.; Orkin, S.H.; Collins, T. Proc. Natl. Acad. Sci. U.S.A. 85, 1492-1496, 1988 A;Title: Platelet-derived growth factor A chain: gene structure, chromosomal loc A;Reference number: A28964; MUID:88144463 A;Accession: A28964
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A; Residues: 89-172 <HER2>
A; Cross-references: EMBL: 214120
C; Superfamily: platelet-derived grov
C; Keywords: growth factor; mitogen;
                                                                                                                            A;Cross-references: GB:X03795; NID:g35365; PIDN:CAA27421.1; PID:g35366 A;Experimental source: clonal glioma cell line U-343 MGaC12:6, a tumor R;Hoppe, J.; Schumacher, L.; Eichner, W.; Weich, H.A. FEBS Lett. 223, 243-246, 1987 A;Title: The long 3'-untranslated regions of the PDGF-A and -B mRNAs ar A;Reference number: S00173; MUID:88030061 A;Accession: S00173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-21 <TAK;
R;Bonthron, D.; Collins, T.; Grzeschik, K.
Genomics 13, 257-263, 1992
A;Title: Platelet-derived growth factor A
A;Reference number: A42002; MUID:92307656
A;Accession: A42002
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Biochim. Biophys. Acta 1222, 511-514, 1994
A;Title: Gene regulation by the 5'-untranslated region
A;Reference number: S47564; MUID:94312450
A;Status: preliminary
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A:Cross-references: EMBL:X06374; NID:g35363; PIDN:CAA29677.1; PID:g35364 R;Rorsman, F.; Bywater, M.; Knott, T.J.; Scott, J.; Betsholtz, C. Mol. Cell. Biol. 8, 571-577, 1988
                                                                                                                                                                                                                                                                                                                                                                  A; Title: cDNA sequence and chromosomal localization A; Reference number: A01379; MUID: 86203630 A; Accession: A01379
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                                                                              A; Molecule type: mRNA
A; Residues: 1-193, 'DVR' <HOP>
                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-211 <BET>
                                                                                                                                                                                                                                                                                                                                                                                                                                              R; Betsholtz, C.; Johnsson, Nature 320, 695-699, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary; not
A;Molecule type: DNA
A;Residues: 152-211 <BO2>
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Best Local :
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32; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               compared with
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Pred. No. 0.0039;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P.; Urdea, M.S.;
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RPTQV-----QLRPVQVRKIEIVRKKPIFKKAT-VTLEDHLACKC

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A;Cross references: GDB:120266; OMIM:173430
A;Map position: 7922-7922
A;Introns: 21/3; 54/1; 89/1; 151/3; 194/1
C;Complex: homodimer; heterodimer (see PIR:PFHUG2)
C;Superfamily: platelet-derived growth factor
C;Keywords: alternative splicing; glycoprotein; growth factor; mitogen; platelet
E;1-20/Domain: signal sequence #status predicted <PRO>
F;21-86/Domain: propeptide #status predicted <PRO>
F;87-211/Product: platelet-derived growth factor chain A #status predicted
F;162/Region: receptor binding #status predicted
F;96-10/129-177,133-179/Disulfide bonds: interchain (to chain B-133 in heterodimeric form) #status
F;132/Disulfide bonds: interchain (to chain B-124 in heterodimeric form) #status pred
F;132/Disulfide bonds: interchain (to chain B-124 in heterodimeric form) #status pred
F;132/Disulfide bonds: interchain (to 133 in homodimeric form) #status pred
F;132/Disulfide bonds: interchain (to 133 in homodimeric form) #status pred
F;134/Binding site: carbohydrate (Asn) (covalent) #status predicted
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A:Note: the authors translated the codon ACA for residue 64 as Arg, CGT for residue 65 a C:Comment: Platelet-derived growth factor, a potent mitogen for cells of mesenchymal oric;Comment: A carboxyl-terminal propeptide may be removed from the precursor by proteolys C:Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R:Devare, S.G.; Reddy, E.P.; Law, J.D.; Robbins, K.C.; Aaronson, Proc. Natl. Acad. Sci. U.S.A. 80, 731-735, 1983
A;Title: Nucleotide sequence of the similar sarcoma virus genome: A;Reference number: A03982; MUID:83144004
A;Accession: A01381
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A;Accession: A28122
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                                                                                                                                                                                                                                                                                                                               C;Superfamily: platelet-derived growth factor C;Keywords: growth factor; transforming prote F;6-226/Domain: platelet-derived growth facto
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C; Species: simian sarcoma
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A; Residues: 1-226 <DEV>
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A; Residues: 1-63, 'TRD', 67-211 <ROR>
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                                                                                      VAEPAMIAECKTRTEVFEIS-RRLIDRTNANFLVWPPCVEVQRCSG---CC--NNRNVQC 126
                                                                                                                LTEEVRLYSCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQC 62
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36: Conser
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Pred. No. 0.0042;
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Pred. No. 0.0044;
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vascular endothelial growth factor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 14-Jul-1995 #sequence_revision 21-Jul-1995 #text_change 05-Nov-1999
C:Accession: S52130
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A; Residues: 1-190 <SHA>
A; Cross-references: GB:
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A;Accession: S52130
A;Status: preliminary
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A;Molecule type: DNA
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A;Residues: 1-133 <LYT>
A;Residues: 1-133 <LYT>
A;Cross-references: GB:S67520; NID:9456897; PIDN:AAB29220.1; PID:9456899
A;Note: sequence inconsistent with nucleotide translation
A;Note: sequence extracted from NCBI backbone (NCBIN:141420, NCBIP:141425)
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J. Virol. 68, 84-92, 1994
A;Title: Homologs of vascular endothelial
A;Reference number: A49530; MUID:94076465
A;Contents: NZZ
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                                                                                                                                                                                                                                                                                                                                                                                                  R;Sharma, H.S.; Tang, Z.H.; Gho, B.C.G.; Biochim. Biophys. Acta 1260, 235-238, 19
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                                                                                                                  CTPRNFSVSIREEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEV 74
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32; Conservation
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Pred. No. 0.0054;
20; Mismatches 34;
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ALIGNMENTS

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MEDLINE-20317014; PubMed-10858496; Hamada T., U1-Tei K., Miyata Y.;
"A novel gene derived from developing sp member of the PDGF/VEGF family.";
FEBS Lett. 475:97-102(2000).
EMBL; AF091434; AAF00049.1; -.
EMBL; AB033831; BAB03266.1; -.
InterPro; IPR000072; -.
InterPro; IPR0000859; -.
Pfam; PF00341; CDB; 1.
Pfam; PF00431; CDB; 1.
SMART; SM
SEQUENCE
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PRELIMINARY: PRT; 345 AA.

09UL22;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
SECRETORY GROWTH FACTOR-LIKE PROTEIN FALLOTEIN (SPINAL CORD-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                Tsai Y.J., Lee R.K.K., Lin S.P.; "Fallotein, a novel growth factor like gene identified in uterus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; P
                                          PROSITE; PS01180; CUB; 1. PROSITE; PS50278; PDGF_2; 1.
                                                                                                                                                                                                                                                                                                                                           TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-UTERUS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSCDGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GROWTH FACTOR).
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SM00042; CUB;
CE 345 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata;
Primates;
  39029
  X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
    CDE9E51F40633E78
                                                                                                                                                                                                                                                                       spinal cords,
    CRC64;
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100.0%;

Score 621;

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Best Local S
Matches 111
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Matches
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Q9QY71;
Q9QY71;
Q1-MAY-2000
Q1-MAY-2000
Q1-MAR-2001
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Pfam;
SEQUENCE FROM N.A.
TISSUE=OVARY;
Tsai Y.-J., Lee R.
                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE: PS01180; CUB: 1.
PROSITE: PS50278; PDGF_2; 1.
SMART: SM00042; CUB: 1.
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Betsholtz C., Heldin C.-H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
MCBI_TaxID=9606;
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01-0CT-2000 (TrEMBLrel. 15, Last sequence up
01-MAR-2001 (TrEMBLrel. 16, Last annotation
PLATELET DERIVED GROWTH FACTOR C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9NRA1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Li X., Ponten A., Aase K., Karlsson L., Abran Backstrom G., Hellstrom M., Bostrom H., Li H., Betsholtz C., Heldin C.-H., Alitalo K., Ostmar PDGF-C is a novel protease-activated ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000072; InterPro; IPR000859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor.
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                                                                                                                                                                                                                                                                                                                                                                              295
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al Similarity
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1 (TrEMBLrel.
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                                                                                                     Chordata;
Rodentia;
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  -<del>K</del>
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Pred. No. 1.4e-63;
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                                                                                                     Craniata; Vertebrata;
Sciurognathi; Muridae
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    Y.-H.,
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, Li H., Soriano F
, Ostman A., Eriks
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on update)
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ne PDGF alpha
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                                                                                                       Murinae;
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    W.T. -K.;
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Best Local Sim
Matches 104;
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Best Local
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InterPro; IPR000859; -.
Pfam; PF00431; CUB; 1.
PROSITE; PS01180; CUB; 1.
PROSITE; PS50278; PDGF_2; 1
SMART; SM00042; CUB; 1.
  Q9EQX6;
Q9EQX6;
01-MAR-2001
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01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence up
01-MAR-2001 (TrEMBLrel. 16, Last annotation
PLATELET-DERIVED GROWTH FACTOR C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organogenesis
Mech. Dev. 0:0
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Mammalia; Eutheria;
NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mech. Dev. 0:0-0(2000).
EMBL; AF286725; AAF91483.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-SWISS-WEBSTER/NIH;
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                                                                                                                                            OCVPRKVTKKYHEVLOLRPKTGVKGLHKSLTDVALEHHEECDCVCRGNAGG
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03; Conservative
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04; Conservative
    (TrEMBLrel.
                                             PRELIMINARY;
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93.7%;
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Pred. No. 4e-60;
4; Mismatches
    Created)
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                                                                                                                                                                                                                                                                                                             Score 584; DB 11;
Pred. No. 2.5e-59;
4; Mismatches 4;
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                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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InterPro; IPR000859;
Pfam; PF00431; CUB; 1.
PROSITE; PS01180; CUB; 1.
PROSITE; PS0278; PDGF_2; 1.
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Q9I946;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-WISTAR; TISSUE-KIDNEY;
Hamada T., Ui-Tei K., Imaki J.,
"Molecular Cloning of SCDGF-B, &
SCDGF/PDGF-C/fallotein.";
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                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Biochem. Biophys. Res. Commun. 0:0-0(2000). EMBL; AB033830; BAB19969.1; -. SEQUENCE 345 AA; 38734 MW; F296DA6E9B76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-2001 (TrEMBLrel. 16, Last sequence update) 01-MAR-2001 (TrEMBLrel. 16, Last annotation update) SPINAL CORD-DERIVED GROWTH FACTOR.
                                                                                                                                                                                              "A novel gene derived from developing spinal member of the PDGF/VEGF family."; FEBS Lett. 475:97-102(2000).
EMBL; AB033829; BAB03265.1; -.
                                                                                                                                                                                                                                                                                                                      Archosauria; Aves;
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                                                                                                                      SEQUENCE
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Best Local S
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SEQUENCE FROM N.A.

Hamada T., Ui-Tei K., Imaki J., M.
Hamada T., Ui-Tei K., Imaki J., M.
"Molecular Cloning of SCDGF-B, a
SCDGF/PDGF-C/fallokein.*,
SCDGF-DGF-C/fallokein.*,
SCDGF-C/fallokein.*,
SCDGF-C/fallokein.*,
SCDGF-C/fallokein.*,
SCDGF-C/fallokein.*
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                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
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Hamada T., Ui-Tei K., Ima
"Molecular Cloning of SCL
SCDGF/PDGF-C/fallotein.";
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SCDGF-B, a
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hang J., Wei
L., Wu Q.Y.,
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Query Match

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01-JAN-1998
01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Prodom; Provot; 1.
Prodom; Propont629; -; 1.
PROSITE; PS00249; PDGF_1;
PROSITE; PS50278; PDGF_2;
PROSITE; PS50278; PDGF_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     035251;
                                                                                                                                                                                                                                      Ol-MAY-1997 (TrEMBLrel.
Ol-MAY-1997 (TrEMBLrel.
Ol-MAR-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-SPRAGUE DAWLEY:
MEDLINE-97349118; PubMed-9205122;
Yamada Y., Nezu J., Shimane M., Hirata
"Molecular cloning of a novel vascular
                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                  VASCULAR ENDOTHELIAL VEGF-D OR FIGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genomics 42:483-488(1997).
EMBL; AF014827; AAB66557.1; -.
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Mammalia; Eutheria;
     STRAIN-C57BL/6J;
                              SEQUENCE FROM N.A.
                                                                            NCBI_TaxID=10090;
                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                                                                                                 P97946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR000072;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LKVIDEEWQRTQCSPRETCVEVASELGATTNTFFKPPCVNVFRCGG----CC--NEESVMC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CSSGKTVKKYHEVLKFEPGHFKRRGKAKNMALVDIQLDHHERCDCIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PF00341; PDGF;
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56; Conserv
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                                                                                  s (Mouse).
s (Mouse).
Metazoa; Chordata; C
Metazoa; Rodentia; ?
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3 (TrEMBLrel. 05,
1 (TrEMBLrel. 16,
4DOTHELIAL GROWTH
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Rodentia;
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el. 03,
el. 16,
GROWTH
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, Last an
H FACTOR
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Last annotation updat
FACTOR D (C-FOS INDUC
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Pred. No. 4.5e-06;
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                                                                                                        Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata;
Sciurognathi; Muridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                             update)
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                                                                                                                                   Euteleostomi;
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; Murinae; Rat
                                                                                                                                                                                                             GROWTH FACTOR)
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Best Local S
Matches 36
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InterPro; IPR000072; -.
InterPro; IPR000072; -.
InterPro; IPR000072; -.
IPR000000; IPR001629; -] 1.
IPROSITE; PS00249; PDGF_1; I
PROSITE; PS00278; PDGF_2; I
SMART; SM01141; PDGF; I.
SMART; SM01141; PDGF; I.
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043915;
01-JUN-1998 (Trembl.)
01-JUN-1998 (Trembl.)
01-MAR-2001 (Trembl.)
GROWTH FACTOR FIGF:
                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.

MEDLINE-98140120; PubMed-9479493;

Rocchigiani M., Lestingi M., Luddi A.,

Rossi E., Ballabio A., Zuffardi O., Oli

"Human FIGF: cloning, gene structure, a
between the PIGA and the GRPR genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM
SEQUENCE
     Achen
                                                                                                                                                    MEDLINE-97349118; PubMed-9205122;
Yamada Y., Nezu J., Shimane M., Hirata
"Molecular cloning of a novel vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-97030254; PubMed-8876195;
Ordandini M., Marconcini L., Ferruzzi R.,
"Identification of a c-fos-induced gene ti
platelet-derived growth factor/vascular en
family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FIGF OR VEGF-D.
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EMBL; D89628; BAA14002.1;
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Yamada Y., Nezu J., Shimane M., Hirata
"Molecular cloning of a novel vascular
                                                      SEQUENCE FROM N.A.
                                                                                    Genomics 42:483-488(1997).
[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                              MEDLINE-98118549;
                                                                                                                                                                                                                                        TISSUE-LUNG
                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                     Genomics 47:207-216(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LNLLTEEVRLYSCTPRNFSVSIREEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNECQC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MNTSTSYISKOLFEISV---PLTSV----PELVPVKIANHTGCKCLPTG
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     .G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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3 (TrEMBLrel.
1 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 358 AA;
        Jeltsch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
  PubMed=9435229;
ch M., Kukk E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sc1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40908 MW;
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33.3%;
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Pred. No. 8.
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Oliviero S.;
e, and mapping to
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                                                                                                                                                              endothelial growth factor,
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endothelial growth
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VASCULAR ENDOTHELIAL GROWTH F/
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                                   Query Ma
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Matches
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InterFo; IPRO00072; ...
Pfam; PF00341; PDGF; 1.
ProDom; PD001629; ...
PROSITE; PS00249; PDGF_1: 1
PROSITE; PS002749; PDGF_2: 1
SMART; SM00141; PDGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *Vascular endothelial growth factor D (VEGF-D) is a ligand tyrosine kinases VEGF receptor 2 (Flk1) and VEGF receptor 3 Proc. Natl. Acad. Sci. U.S.A. 95:548-553(1998).

EMBL; Y12864; CAA73371.1; JOINED.

EMBL; Y12865; CAA73371.1; JOINED.

EMBL; Y12866; CAA73371.1; JOINED.

EMBL; Y12867; CAA73371.1; JOINED.

EMBL; Y12868; CAA73371.1; JOINED.

EMBL; Y12869; CAA73371.1; JOINED.

EMBL; Y12869; CAA73371.1; JOINED.

EMBL; Y12869; CAA73371.1; JOINED.

EMBL; Y12869; CAA73371.1; JOINED.
                                                                                                                                    Cleaver O., Tonissen K.F., S
Submitted (JUN-1997) to the
EMBL; AF008593; AAB63679.1;
HSSP; P15692; IVPP.
InterPro: IPR000072; -.
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ProDom; PD001629; -; 1.
PROSITE; PS00249; PDGF_1; 1.
PROSITE; PS50278; PDGF_2; 1.
                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordat
Amphibia; Batrachia; Anura;
                                                                                                                                                                                    SEQUENCE FROM N.A.
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CQVREILVDIFQEYPDEVEYIFKPSCVPLMRCAG---CC--NDESLECVPTECYNITMQI 106
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AJ000185; CAA039
Y12863; CAA73370
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AA; 17234 MW;
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                                   21;
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Last annotation 
FACTOR 122.
                                   Score 108.5;
Pred. No. 6.6e
21; Mismatches
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Query Match
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Q15354;
                     protein.";
Nucleic Acids Res. 23:2815-2822(1995).
EMBL: X83705; CAA58679.1;
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Cleaver O., Tonissen K.F., i
Submitted (JUN 1997) to the
EMBL; AF008594; AAB63680.1;
HSSP; P15692; IVGH.
                EMBL;
HSSP;
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Eukaryota; Metazoa; Chordata; Craniata; Ve
Amphibia; Batrachia; Anura; Mesobatrachia;
                                                                          "A novel human c-sis mRNA species is intron 1 and contains the code
                                                                                                                     TISSUE=CHORIOCARCINOMA;
MEDLINE=95388493; PubMed=7659502;
                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                       Dirks R.P.H., Onnekink
                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                             NCBI_TaxID=9606;
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rPro; IPR000072;
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Primates;
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Pred. No. 8.
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is transcribed from a promoter
e for an alternative PDGF B-like
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TISSUE-BRAIN;

MEDLINE-97077124; PubMed-8919691;

Grimmond S., Lagercrantz J., Drinkwater C., Si
Grimmond S., Lagercrantz J., Drinkwater S., No
Pollock P., Gotley D., Carson E., Rakar S., No
Hayward N., Weber G.;

"Cloning and characterization of a novel human
vascular endothelial growth factor.";
Genome Res. 6:122-129(1996).

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PROSITE; PS50278; PDGF_2; 1
SMART; SM00141; PDGF; 1
NON_TER 185 .185
SEQUENCE 185 AA; 20774 M
                                       Interpro; IPR000072; -. Pfam; PF00341; PDGF; 1. ProDom; PD001629; -; 1. PROSITE; PS00249; PDGF_1; 1 PROSITE; PS50278; PDGF_2; 1 SMART; SM00141; PDGF; 1.
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                Signal
SIGNAL
                                                                                                                   EMBL; U43368; AAA91462.1;
EMBL; U52819; AAC50721.1;
HSSP; P15692; 1VPP.
                                                                                                                                                            splice isoform.;
J. Biol. Chem. 271:19310-19317(1996).
                                                                                                                                                                                  "Genomic organization of the mouse and huendothelial growth factor B (VEGF-B) and
                                                                                                                                                                                                              TISSUE-FIBROSARCOMA HT-1080;
MEDLINE-96325041; PubMed-8702615;
Olofésson B., Pajusola K., von Euler G.,
Eriksson U.;
                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                       endothelial cells.";
                                                                                                                                                                                                                                                                                                                                   Olofsson B.;
                                                                                                                                                                                                                                                                                                                                               TISSUE=FIBROSARCOMA HT-1080;
MEDLINE=96197355; PubMed=8637916;
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Mammalia; Eutheria;
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36; Conserv
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22
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Primates;
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Last annotation update)
VRF186 PRECURSOR.
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Pred. No. 0.00021;
2; Mismatches 34
POTENTIAL.
VEGF RELATED FACTOR ISOFORM VRF186
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Nordenskjold M., Wa
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                                                                                                   Query Match
Best Local
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 101
                      74
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                                                                  15 SCTPRNFSVSIREELKRT-DTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHE
ILMIRYPS-----SQLGEMSLEEHSQCEC
                     VLQLRPKTGVRGLHKSLTDVALEHHEECDC 103
                                            TCQPREVVVPLTVELMGTVAKQLVPSCVTVQRCGG--
                                                                                      l Similarity
27; Conserv
                                                                                                                                                  207
                                                                                          Conservative
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Α.:
                                                                                                   16.9%;
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                                                                                      ; Score 105; DB 4;
; Pred. No. 0.00023;
17; Mismatches 34
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 124
                                             -CCPD--DGLECVPTGQHQVRMQ 100
                                                                                                              Length 207;
                                                                                          Indels
                                                                                          12;
                                                                                       Gaps
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